## **REMARKS**

Claims 1-3, 10-12, and 19-48 are pending in the present application. All of these claims stand rejected. The Applicants request reconsideration of the rejections for the following reasons.

Claims 28, 29, 43-45 were rejected as allegedly failing to comply with the enablement requirements set forth in 35 U.S.C. § 112, first paragraph. In particular, the Office Action asserts that the specification does not disclose archiving digital data and cryptographic commutative checksum. The Applicants respectfully disagree with this assertion, however, and submit that indeed the specification discloses archiving of digital data and cryptographic commutative checksum. In particular, lines 15-26 at page 10 of the present application expressly disclose these claimed features. Accordingly, the Applicants respectfully submit that one of ordinary skill in the art would most definitely be enabled to make and/or use the invention. Accordingly, withdrawal of this rejection is requested.

Claims 1-3, 10-12, and 19-48 were rejected under 35 U.S.C. §103(a) as being unpatentable over the publication "Data Communications, Computer Networks and Open Systems" by Halsall (herein after "Halsall"). The Applicants respectfully traverse this rejection for the following reasons.

With respect to independent claim 10, the Office Action is asserted that *Halsall* teaches all of the elements of the claim expect for the feature "cryptographic operation which cryptographically protects said first commutative checksum." The Office Action asserts that *Halsall* nonetheless teaches that data encryption operations are standard implementation on transmissions that require privacy on an unprotected network and are disclosed on page 719; 2nd paragraph of *Halsall*. The Office Action concludes that it would have been obvious to one of ordinary skill in the art to implement cryptographic operation to secure a first commutative checksum as an implementation would insure that a message is cryptographically secured. The Applicants respectfully disagree with these and other assertions in the Office Action for the following reasons.

First, the section referenced in the Office Action of *Halsall* (i.e., page 719, 2nd paragraph) fails to teach a specific "cryptographic operation which cryptographically protects said first commutative checksum." The section, instead, merely teaches that encryption is to be

applied to data transfer that involve a network. Accordingly, the cited article does not teach or suggest all of the elements of claim 10.

Additionally, one of ordinary skill in the art would not have been motivated to modify the teachings of *Halsall* to arrive at the features of claim 10. In particular, the method taught by the section referenced on page 719 et seq. of *Halsall*, which proposes encoding of a non-encoded, clear text, would not be obvious for one of ordinary skill in the art to combined with the methodology taught in the first referenced sections of *Halsall* where the method ends with a commutative checksum. In particular, one of ordinary skill in the art would find no motivation, either in the teachings of *Halsall* or in the knowledge known in the art, to utilize a method for encoding text with a commutative checksum, when the commutative checksum already achieves this objective. Thus, the combination is redundant and fails to apply the correct knowledge of ones ordinary skill in the art.

Furthermore, the first methodology taught by *Halsall* concerning finding a commutative checksum, does not teach encoding the sum and the second methodology concerning encoding does not teach a commutative checksum. As argued above, this is logically the case because to incorporate both methodologies into one, singular system would be redundant and, more importantly, nonsensical to one of ordinary skill in the art. Accordingly, the Applicants respectfully submit that *Halsall* does not teach or suggest all of the features of claimed 10, especially in view of the knowledge of one of ordinary skill in the art. Accordingly, the rejection of claim 10 should be withdrawn.

With respect to independent claims 1-3, 11 and 12, these claims are allowable for at least the same reason presented above with respect to independent claim 10. Moreover, dependent claims 19-48 are allowable on their merits and at least due to their respective dependencies on the independent claims, discussed above.

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In light of the foregoing, the Applicants respectfully submit that the claims are allowable and request that a timely notice of allowance be issued in this case.

Respectfully submitted,

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